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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/803,445	03/09/2001	Richard V. Jessop	RVJ-P6	6914

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DAVIDSON, DAVIDSON & KAPPEL, LLC
485 SEVENTH AVENUE, 14TH FLOOR
NEW YORK, NY 10018

EXAMINER

SHAPIRO, LEONID

ART UNIT	PAPER NUMBER
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2673

DATE MAILED: 01/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/803,445

Applicant(s)

JESSOP, RICHARD V.

Examiner

Leonid Shapiro

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 35-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 35-39 and 43-45 is/are rejected.
- 7) ☒ Claim(s) 40-42 and 46 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 35-39, 43, 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sheridan (US Patent No. 5,659,330) in view of Comiskey et al. (US Patent No. 6,473,072 B1) and further in view of Berge et al. (US Patent No. 6,369,954 B1), and further in view of Faris (US Patent No. 5,165,013).

As to claim 35, Sheridan teaches display device comprising: a first light-transmissive sheet having an outer and inner surface (See Fig. 11, item 84, in description See Col. 7, Lines 18-50); a second light-transmissive sheet having an outer surface and an inner surface (See Fig. 11, item 82, in description See Col. 7, Lines 18-50); one or more measures of a light-transmissive liquid (See Fig. 1, items 22, 24, in description See Col. 3, lines 38-47); a sealed space between inner surface of the first sheet and the inner surface of the second sheet, the liquid being enclosed within sealed space (See Fig. 3, items 12, 14, 17, in description See Col. 3, Lines 23-38); a power supply (See Fig. 11, item P); a microprocessor or other suitable means coupled to the power supply and the electrical elements, capable of selectively controlling the electrical potential delivered to each of electrical elements so as to create an electrical field affecting each

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measure of liquid (See Fig. 1, 11 items 90,94,100, 102, P, in description See Col. 5, Lines 23-28 and Col.7, Lines 18-51).

Sheridon does not teach selected color areas of multi-colored light filters.

Comiskey et al. shows the drawing system permits the user to draw in multiple colors using pixilated rear line electrodes (See Fig. 14a, 14b, items 144a, 144b, 144c, in description See Col.15, Lines 8-58).

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement Comiskey et al. approach in Sheridan apparatus in order to change display color on the first substrate upon activation of the switch (See Col.2, Lines 64-65 in Comiskey et al. reference).

Sheridon and Comiskey et al. do not teach inducing change in shape of affected liquid measures, and thereby causing light passing through liquid measures to be directed onto or through selected areas.

Berge et al. teaches inducing change in shape of affected liquid measures, by liquid lenses having a variable electrically controlled focus by using the phenomenon of electrowetting (See Figs. 1,3, items A, B, in description See Col. 3, Lines 3-39, Col. 4, Lines 21-53 and Col. 6, Lines 23-29).

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement Berge et al. approach in Sheridan and Comiskey et al. apparatus to direct light onto or through selected colored area of multi-colored light filters in order to achieve a luminous color screen which may be of big size and of moderate cost (See Col. 6, Lines 28-29 in the Berge et al. reference).

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Sheridon, Comiskey et al. and Berge et al. do not show one or both inner surfaces of light-transmissive sheets are hydrophobic.

Faris teaches hydrophobic coating (See Fig. 4A, item 9, in description See Col. 3, Lines 53-56).

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement Faris approach in Sheridan, Comiskey et al. and Berge et al. apparatus in order to achieve confining movement of the drops (See Col. 2, Lines 22-23 in the Lee reference).

As to claim 36, Comiskey et al. teaches a light source in the device (See Col.3, Lines 35-38).

As to claims 37-38, Comiskey et al. teaches one of the sheets is light reflecting, and a plurality of multi-colored light filters are located closer to the (external) light source than is the light reflecting material. (See Col.3, Lines 35-38).

As to claim 39, Sheridan teaches a second light-transmissive liquid is immiscible with the first liquid, where one liquid is polar, and the other liquid is non-polar (See Fig. 1, items 22,24, 11,12, in description see Col.3, lines 39-47).

As to claim 43, Sheridan teaches a stylus having electrical switch electrically coupled to and capable of individually activating each of the plurality of electrical elements (See Fig. 11, items 102, 87, in description See Col. 7, Lines 18-51), and Lee teaches activation of the stylus switch and movement of stylus in proximity of the first sheet will cause any particular measure of liquid to move to a position (See Fig. 1, 16, 32, 34, 36, in description See from Col. 3, Line 54 to Col. 4, Line 10), and Comiskey et al. teaches different colors may be selectively be displayed (See Fig. 14a-14b, items 144a-144c, in description See Col. 15, Lines 8-58).

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As to claim 45, Comiskey et al. teaches a means of dynamically changing the color of the light emitted by the lamp (See Fig. 14a-14b, items 144a-144c, in description See Col. 15, Lines 8-58).

3. Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sheridan, Comiskey et al., Berge et al. and Faris and further in view of Mumford (US Patent No. 6,377,249 B1).

Sheridon teaches a stylus having electrical switch electrically coupled to and capable of individually activating each of the plurality of electrical elements (See Fig. 11, items 102, 87, in description See Col. 7, Lines 18-51), and Lee teaches activation of the stylus switch and movement of stylus in proximity of the first sheet will cause any particular measure of liquid to move to a position (See Fig. 1, 16, 32, 34, 36, in description See from Col. 3, Line 54 to Col. 4, Line 10), and Comiskey et al. teaches different colors may be selectively be displayed (See Fig. 14a-14b, items 144a-144c, in description See Col. 15, Lines 8-58).s 5-20).

Sheridon, Comiskey et al. , Berge et al. and Faris do not teach a stylus electrically linked to a control system as a microprocessor.

Mumford teaches a stylus electrically linked to a control system as a microprocessor IC which is in turn linked to the display system (See Fig. 1, items 12,16,18.26,20, in description see Col. 6, Lines 15-30).

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement Mumford approach in Sheridan, Comiskey et al. , Berge et al. and Faris apparatus in order to change display color on the first substrate upon activation of the switch.

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4. Claims 40-42, 46 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

5. Applicant's arguments filed on 12-15-03 with respect to claims 35-39 and 43-46 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

The Koumura et al. (US Patent No. 5,574,598) reference discloses varifocal lens.

Telephone inquire

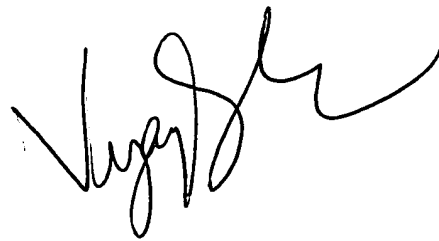
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonid Shapiro whose telephone number is 703-305-5661. The examiner can normally be reached on 8 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 703-305-4938. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.

Is

A handwritten signature in black ink, appearing to read 'Vijay Shankar', with a stylized flourish at the end.

**VIJAY SHANKAR
PRIMARY EXAMINER**